

ABSTRACT

A fuel cell power generation system, equipped with a fuel reforming device (60) and a fuel cell body (4), includes valves (30a, 32), pipelines (30b, 31), a condenser (34), a pump (35), etc. for feeding a burner exhaust gas (25) (raw gas) discharged from a heating burner (10) of the fuel reforming device (60) into the fuel reforming device (60), and an inert gas formation device (5A) including an oxidizable and reducible oxygen adsorbent (28), which is disposed in the pipelines (30b, 31), and adsorbs oxygen in the burner exhaust gas (25) to remove oxygen from the burner exhaust gas (25) and form an inert gas (40). The fuel cell power generation system can reliably remove residual matter, without leaving it within the fuel reforming device (60), in a simple manner at a low cost and with a compact configuration.